

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A silicate phosphor containing a silicon element and a metallic element comprising:

~~a silicon system material having particles which form center nuclei of the phosphor; and~~

~~a metallic element dispersed and mixed in each of the particles of the silicon system material;~~

wherein a mean particle size of the phosphor is from 0.01 to 1 μm , and ~~particles of the phosphor are not fused together~~ a coefficient of variation of inter-particle composition distribution of constituting elements in the particles of the phosphor is not more than 50%.

2. (Currently amended) ~~A silicate phosphor comprising:~~ The phosphor of claim 1,

~~a silicon system material having particles which form center nuclei of the phosphor; and~~

~~a metallic element dispersed and mixed in each of the particles of the silicon system material;~~

~~wherein a mean particle size of the phosphor is from 0.01 to 1 μm , a value of a coefficient of variation of particle size distribution is not more than 40%, and a shape of individual particle~~ shapes of individual particles of the phosphor is are approximately equal to each other.

3. (Original) The phosphor of claim 1, wherein a number of particles having uni-

form composition distribution of constituting elements in the particles of the phosphor is not less than 50%.

4.-6. (Canceled).

7. (Currently amended) A method for producing ~~a precursor of~~ a silicate phosphor, comprising the steps of:

~~a precursor forming step for forming the precursor of the phosphor by mixing a silicon system liquid material, in which wet silica is dispersed in a liquid, with a metal system liquid material including a metallic element~~ a first liquid dispersion of wet silica with a second liquid containing a metallic element; and calcining the precursor, wherein calcining includes the steps of,

a first calcining of the precursor such that any fusion of the wet silica is insubstantial,

a second calcining comprising calcining the calcined product obtained in the first calcining.

8. (Original) The method of claim 7, wherein the wet silica is colloidal silica.

9. (Canceled).

10. (Currently amended) The method of claim 97, wherein a BET specific surface area of the wet silica is not less than 50 m²/g.

11. (Currently amended) The method of claim 97, wherein ~~the~~ at least one metallic element is selected ~~at least one~~ from the group consisting of Zn, Mn, Mg, Ca, Sr,

Ba, Y, Zr, Al, Ga, La, Ce, Eu and Tb.

12. (Currently amended) The method of claim 97, wherein in the precursor forming step, a solution including a precipitant which forms a precipitate by reacting with the metallic element is mixed.
13. (Original) The method of claim 12, wherein the precipitant is organic acid or alkali hydroxide.
14. (Currently amended) The method of claim 97, wherein the wet silica is prepared beforehand.
15. (Currently amended) The method of claim 97, wherein the first liquid is water, ~~alcohols or a mixture of the water and the alcohols~~ alcohol(s), or a mixture of water and alcohol(s).
16. (Currently amended) The method of claim 97, wherein the ~~metal system~~ second liquid ~~material includes~~ is water, ~~alcohols or a mixture of the water and the alcohols~~ alcohol(s), or a mixture of water and alcohol(s).
- 17.-19. (Canceled).
20. (Currently amended) A phosphor produced by the method of claim 97.
- 21.-23. (Canceled).
24. (Currently amended) The phosphor of claim 1, wherein the phosphor is produced by the method of claim 97.

25. (Canceled).
26. (New) The method of claim 7, further comprising a step of mixing a sintering inhibitor in a calcined product obtained in the first calcining.